

sequence of hydrophobic amino acids which would be cleaved off of the molecule via the endoplasmic reticulum to provide a mature protein.--

Page 32, line 9-page 33, line 10: replace by the following:

C2 --One could also use these molecules to test the efficacy of IL-9 agonists or antagonists when administered to a subject, such as a subject suffering from lymphoma, an immune system disorder such as an allergy, acquired immune deficiency syndrome, autoimmune diabetes, thyroiditis, or any of the other conditions described in, e.g., U.S. Patent Nos. 5,830,454, 5,824,551, and pending application Serial No. 08/925,348, filed on September 8, 1997 now allowed, all of which are incorporated by reference. The molecules can also be used to meditate the role of IL-9 in these and other conditions. To elaborate, since IL-9 induces TIFs, the TIFs are useful as IL-9 activity mediators. Thus, a further aspect of the invention is a method to determine activity of endogenous IL-9, such as in situations where excess IL-9 activity is implicated, such as asthmas, allergies, and lymphomas. One can also block or inhibit IL-9 activity by blocking or inhibiting TIF or TIF activity, using, e.g., antisense molecules, antibodies which bind to TIF, or other antagonists of these molecules. For example, muteins of TIF, which bind to the TIF receptor but do not activate it, thereby inhibiting IL-9 inducing activity, are a feature of the invention. Examples of conditions which can be treated by the use of such TIF muteins are allergies, asthma, and so forth. Muteins in accordance with the invention can be made in accordance with, e.g., Weigel, et al, Eur. J. Biochem. 180(20):295-300 (1989) and Epps, et al, Cytokine 9(3):149-156 (1997), both of which are incorporated by reference. Such muteins can be used in the treatment of asthma, allergies, or both. Further, it will be clear to the skilled artisan that the models set forth, supra, can also be used to screen for appropriate muteins. The ability to regulate IL-9 activity is important in conditions such as those listed supra, as well as conditions such as apoptosis, including cortisol induced apoptosis, conditions involving the nuclear expression of BCL-3, since IL-9 is known to induce such expression, and so forth. "Antibodies," as used herein, refers to any portion of an antibody which binds to TIF, including chimeric and humanized antibodies.

IN THE CLAIMS

Replace claim 1 by: